

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, in the application:

Listing of Claims:

1. (currently amended) In a network including a router and an optical cross-connect system (OXC), a method for responding to a failure, the method comprising:

detecting the failure in the router;

sending a signal from the router to the OXC, where the signal indicates the failure;

causing a working port of the OXC to directly connect to a protection port of the router in response to detection of the signal; and

transmitting data from the router to the OXC via the protection port.

2. (previously presented) The method of claim 1, where the sending further comprises:

sending an in-band signal to the OXC.

3. (previously presented) The method of claim 2, where the sending an in-band signal to the OXC further comprises:

sending a Synchronous Optical Network (SONET) signal to the OXC.

4. (previously presented) The method of claim 1, where the sending further comprises:

sending an out-of-band signal to the OXC.

5. (previously presented) The method of claim 4, where the sending an out-of-band signal comprises:

addressing the out-of-band signal to an Internet Protocol address associated with the OXC.

6. (currently amended) A method for responding to a failure in a network including a router and an optical cross-connect system (OXC), the method comprising:

receiving a signal at the OXC from the router, the signal indicating a failure of a working port in the router; and

connecting a protection port of the router directly to a working port of the OXC in response to receiving the signal.

7. (previously presented) The method of claim 6, where the receiving further comprises:

receiving an in-band signal at the OXC.

8. (previously presented) The method of claim 7, where the receiving an in-band signal at the OXC comprises:

receiving a Synchronous Optical Network (SONET) signal at the OXC.

9. (previously presented) The method of claim 6, where the receiving further comprises:

receiving an out-of-band signal at the OXC.

10. (previously presented) The method of claim 9, where the receiving an out-of-band signal further comprises:

addressing the out-of-band signal to an Internet Protocol address associated with the OXC.

11. (previously presented) An optical cross-connect system comprising:
a spare port for transmitting low priority data from a router; and
a working port for transmitting high priority data from a primary router, where
the working port is connected to the router in response to a failure of the primary router.

12. (previously presented) The optical cross-connection system of claim 11,
where the working port is connected to the router in response to receiving an in-band
signal from the router.

13. (previously presented) The optical cross connection system of claim 12, where the working port is connected to the router in response to receiving a Synchronous Optical Network (SONET) signal from the router.

14. (previously presented) The optical cross-connection system of claim 11, where the working port is connected to the router in response to receiving an out-of-band signal from the router.

15. (currently amended) A communications network for transmitting data, the communication network comprising:

a router for receiving the data from a terminal, the router comprising:
a working port for receiving the data from the terminal; and
a protection port for receiving the data from the terminal in response to a failure of the working port; and
an optical cross-connect system (OXC) for receiving the data from the router, the optical cross-connect system comprising a working port, where the working port of the OXC is directly connected to the protection port of the router in response to a signal received from the router indicating the failure of the working port of the router.

16. (currently amended) The communications network of claim 15, where the router transmits a signal indicating the failure to the OXC, the signal causing the OXC to connect the protection port directly to the working port of the OXC.

17. (previously presented) The communications network of claim 16, where the signal is an in-band signal.

18. (previously presented) The communications network of claim 17, where the in-band signal is a Synchronous Optical Network (SONET) signal.

19. (previously presented) The communications network of claim 16, where the signal is an out-of-band signal.

20. (previously presented) The communications network of claim 19, where the out-of-band signal is addressed to an Internet Protocol address associated with the OXC.